



Aviation Investigation Final Report

Location: IOWA CITY, Iowa Accident Number: CHI99LA187

Date & Time: June 17, 1999, 14:40 Local Registration: N4531R

Aircraft: Grumman AA-5KB Aircraft Damage: Substantial

Defining Event: 2 Minor

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The pilot reported that as they flew the left downwind for the touch and go on runway 24, the flight instructor 'mentioned an approach which involved a short field, soft field, dead stick over a 50 foot obstacle.' The pilot reported that he attempted to land using the suggested technique. The pilot reported the flight instructor told him when to pull the power to idle and begin the glide. The pilot reported, '... I realized I was too high, so [I] made an 'S' turn to the south and then to the north, descending all the while.' At 50 feet agl the stall warning horn sounded. The pilot applied full power and lowered the nose slightly, but the airplane impacted the soft ground beside the runway in a 'pancake' fashion. The pilot reported the instructor pilot did not brief the landing technique prior to the flight, and the flight instructor did not demonstrate the maneuver in flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot stalled the airplane. Factors included the instructor pilot's inadequate preflight briefing and improper in flight decision.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Findings

- 1. (C) STALL INADVERTENT PILOT IN COMMAND
 2. (F) PREFLIGHT PLANNING/PREPARATION INADEQUATE PILOT IN COMMAND(CFI)
 3. (F) IN-FLIGHT PLANNING/DECISION IMPROPER PILOT IN COMMAND(CFI)

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Factual Information

On June 17, 1999, at 1440 central daylight time, a Grumman AA-5B, N4531R, was substantially damaged when it impacted the ground during a touch and go landing. The pilots were practicing a landing using the short field landing over a 50 foot obstacle technique. The 14 CFR Part 91 flight had departed Washington Municipal Airport, Washington, Iowa, en route to Iowa City Municipal Airport, Iowa City, Iowa, on a local training flight. The pilot reported the training flight was the second flight hour of the required three flight hours leading to Level VII of the Pilot Proficiency Award Program. The private pilot and instructor pilot received minor injuries. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported they had practiced several touch and goes at the Washington Municipal Airport. He reported they returned to Iowa City Municipal Airport and completed two more touch and goes. The second approach was a "short field" landing over a 50 foot obstacle. The pilot reported that the flight instructor did not think the airplane would have cleared a 50 foot obstacle and probably would have run off the "short runway." Another touch and go was attempted.

The pilot reported that as they flew the left downwind for runway 24, the flight instructor "mentioned an approach which involved a short field, soft field, dead stick over a 50 foot obstacle." The pilot reported that he repeated the landing instructions and attempted to land using the suggested technique. The pilot reported the flight instructor told him when to pull the power to idle and begin the glide. The pilot reported that he "realized I was too high, so [I] made an "S" turn to the south and then to the north, descending all the while."

He reported that the airplane was north of runway 24 and at 50 feet agl when the stall warning horn sounded. He reported that he immediately applied full power and lowered the nose slightly. He reported the airplane impacted the soft ground beside the runway in a "pancake" fashion. Rescue personnel were required to get the pilots out of the airplane. The pilots were transported to a hospital for observation and minor injuries.

The pilot reported the instructor pilot did not brief the landing technique prior to the flight, and the flight instructor did not demonstrate the maneuver in flight.

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Pilot Information

Certificate:	Private	Age:	57,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	October 16, 1997
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	641 hours (Total, all aircraft), 584 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman	Registration:	N4531R
Model/Series:	AA-5KB AA-5KB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	AA5B-1163
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 22, 1998 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	33 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1100 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-360-A4K
Registered Owner:	DEAN THORNBERRY	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	
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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	IOW ,662 ft msl	Distance from Accident Site:	
Observation Time:	14:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ition	
Departure Point:	WASHINGTON , IA (IOW)	Type of Flight Plan Filed:	None
Destination:	(IOW)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	IOWA MUNICIPAL AIRPORT IOW	Runway Surface Type:	Asphalt
Airport Elevation:	662 ft msl	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	
Runway Length/Width:	4345 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	41.669292,-91.509429(est)

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Administrative Information

Investigator In Charge (IIC): Silliman, Jim

Additional Participating Persons:

Original Publish Date: November 22, 2000

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=46575

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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